

Fisheries Extension Enhancement: Great Lakes Fisheries Leadership Institute

Federal \$ Requested: \$150,000

Matching Funds: \$65,938*

*additional match **sufficient** to reach required \$75,000 is contained in
Wisconsin Sea Grant Omnibus Award NA16RG2257 (\$10,000).

Principal Investigator



Dr. Rochelle Sturtevant, Great Lakes Network Sea Grant Extension Agent

Contacts

Project Coordinator:

Dr. Rochelle Sturtevant

Great Lakes Network Sea Grant Extension Agent

NOAA/Great Lakes Environmental Research Laboratory

2205 Commonwealth Blvd.

Ann Arbor, MI 48 105

734-741-2287

Jeff Gunderson, Program Leader
Minnesota Sea Grant
218-726-8715

Fred Snyder, Co-Program Leader
Ohio Sea Grant
419-635-1022

Phil Moy, Fisheries Specialist
Wisconsin Sea Grant
920-683-4697

Eric Obert, Program Leader
Pennsylvania Sea Grant
8 14-898-6453

Brian Miller, Program Leader
Illinois/Indiana Sea Grant
765-494-3573

Dave White, Program Coordinator
New York Sea Grant
315-312-3042

John Schwartz, Program Leader
Michigan Sea Grant
517-355-9637

Dale Baker, Program Leader
New York Sea Grant
607-255-2832

Jennifer Read, Assistant Director
Michigan Sea Grant
734-936-3622

Mark Malchoff, Program Leader
Lake Champlain Sea Grant
518-564-3038

Frank Lichtkoppler, Co-Program Leader
Ohio Sea Grant
440-350-2267

SEA GRANT PROJECT SUMMARY FORM

90-2 Modified

- (1) INSTITUTION: Great Lakes Sea Grant Network
(2) TITLE: Fisheries Extension Enhancement: Great Lakes Fishery Leadership Institute
(3) PROJECT NUMBER:
(5) PROJECT STATUS: New
(4) REVISION DATE:
(6) INITIATION DATE: 9/1/2002
(7) COMPLETION DATE: 8/31/2003

- (9) PRINCIPAL INVESTIGATOR: Dr. R. Sturtevant
(9a) AFFILIATION: Great Lakes Sea Grant Network
(10) CO-PRINCIPAL INVESTIGATOR: J. Gunderson
(10a) AFFILIATION: MN Sea Grant
(10) CO-PRINCIPAL INVESTIGATOR: Dr. P. Moy
(10a) AFFILIATION: WI Sea Grant
(10) CO-PRINCIPAL INVESTIGATOR: B. Miller
(10a) AFFILIATION: IL/IN Sea Grant
(10) CO-PRINCIPAL INVESTIGATOR: Dr. J. Read
(10a) AFFILIATION: MI Sea Grant
(10) CO-PRINCIPAL INVESTIGATOR: Dr. J. Schwartz
(10a) AFFILIATION: MI Sea Grant
(10) CO-PRINCIPAL INVESTIGATOR: F. Lichtkoppler
(10a) AFFILIATION: OH Sea Grant
(10) CO-PRINCIPAL INVESTIGATOR: F. Snyder
(10a) AFFILIATION: OH Sea Grant
(10) CO-PRINCIPAL INVESTIGATOR: E. Obert
(10a) AFFILIATION: PA Sea Grant
(10) CO-PRINCIPAL INVESTIGATOR: D. White
(10a) AFFILIATION: NY Sea Grant
(10) CO-PRINCIPAL INVESTIGATOR: D. Baker
(10a) AFFILIATION: NY Sea Grant
(10) CO-PRINCIPAL INVESTIGATOR: M. Malchoff
(10a) AFFILIATION: Lake Champlain Sea Grant
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(10b) EFFORT: *
(10b) EFFORT: 0.5 mo.
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(10b) EFFORT: 0.25 mo.

* No time charged to proposal or match

- (13) S.G. FUNDS: \$150,000
(15) LAST YEAR'S SG FUNDS: NA
(17) PASS-THROUGH FUNDS: NA
(14) STATE MATCHING FUNDS: \$65,938*
(16) LAST YEAR'S MATCHING FUNDS:
(18) LAST YEAR'S PASS-THROUGH FUNDS:

* additional match sufficient to reach required \$75,000 is contained in Wisconsin Sea Grant Omnibus Award NA16RG2257 (\$10,000)

(19) RELATED PROJECTS: Great Lakes Regional Fisheries Extension Enhancement: Great Lakes Fisheries Leadership Curriculum Development

(21) SEA GRANT STRATEGIC PLAN CLASSIFICATION: 152 – Sea Grant Extension-Special Project

(22) OBJECTIVES:

1. Develop stakeholders from each Great Lakes state as Great Lakes Fishery Leaders - a cohort of leaders with the knowledge and skills necessary to provide effective leadership on fisheries management issues,
2. Create a network of Great Lakes leaders From the broadest possible variety of backgrounds and organizations who are able to call upon each other to effectively address **and/or** advocate regional needs
3. Empower these fishery leaders to influence policy decisions and legislative initiatives
4. Maximize the effective life of citizen volunteers by condensing the learning curve,
5. Minimize frustration of both Great Lakes fisheries management agencies and those citizen leaders and who do not understand the complexities of Great Lakes fishery-related institutional arrangements, history and science.
6. Expose leadership from one end of the Great Lakes region to the issues and concerns of the other parts of the region.
7. Multiply the ability of Great Lakes Sea Grant Extension to reach constituent audiences using a 'teach-the-teacher' model.

(23) METHODOLOGY:

A steering committee comprised of representatives of Great Lakes fisheries management/research agencies and current Great Lakes fisheries leaders (including private sector representation from the sport fishing community) will nominate and select a cadre of emerging Great Lakes **fishery** leaders to receive intensive training designed to enhance the knowledge and skills necessary to make them more effective leaders and advisors on issues relating to the Great Lakes fishery. Training will occur at the state, lake and regional level using a common curriculum and drawing on partner agency experts to serve as instructors.

The Great Lakes Fishery Leadership Institute as proposed here is intended as a pilot program. We are highly confident in its success and anticipate that training of additional cohorts and/or advanced training will be possible when Great Lakes partner agencies and institutions see the value of this training and provide resources for its continuation or should the appropriations for an expanded Sea Grant fisheries extension program be provided.

(24) RATIONALE:

Discussion with Great Lakes partner agencies including the Great Lakes Fishery Commission, U.S. Fish and Wildlife Service, **USGS/BRD Great Lakes Science Center and NOAA/Great Lakes Environmental Research Laboratory** revealed a high priority placed on the regional need for in-depth training to the next generation of leaders i.e.. those who are new leaders to their fisheries related organizations, those likely to become leaders of their organizations within the next few years, and those likely to be serving as advisors to Great Lakes fishery related institutions such as Lake Committees. The proposed Great Lakes Fisheries Leadership Institute is designed to address this need.

The immediate outcome of this pilot Great Lakes Fishery Leadership Institute. will be a cohort of more than sixty committed Great Lakes fishery leaders with the skills and knowledge base necessary to effectively engage Great Lakes fishery management agencies on the issues and capable of providing sound advice. Anticipated near-term impact of this cohort will be immediately quantifiable through the specific commitments required of all Institute participants. This initial cohort will provide the foundation for a long-term. sustained fisheries extension effort as, through a **teach-the-teacher** model, participants raise the level of constituent understanding, involvement and action in their home organizations and local communities. Contact of the Great Lakes Fishery Institute participants with key staff from our partner agencies and **Great** Lakes fishery managers during the **course** of the Institute and beyond will greatly enhance the outreach capacity of these agencies-providing them with an immediate contact, credible to his or her peers, in **a** wide variety of stakeholder groups. We anticipate that many Institute participants will serve on Great Lakes **fishery**-related advisory bodies, such as the Great Lakes Fishery Commission Lake Committees. The infusion of trained leaders with the knowledge and skills necessary to make informed recommendations will result in improved effectiveness of these important Great Lakes advisory groups.

Fisheries Extension Enhancement: Great Lakes Fisheries Leadership Institute

Vision: the Great Lakes Fisheries Leadership Institute

A significant challenge in achieving a sustainable Great Lakes ecosystem and fisheries is the fact that resource users and decision makers do not have enough information to focus on the larger impact of their decisions. A key element in meeting this challenge is an educated, motivated and participating citizenry. Leadership and visionary action by our fisheries stakeholders is critical in defining the future of our Great Lakes fishery resources. Discussion with Great Lakes partner agencies including the Great Lakes Fishery Commission, U.S. Fish and Wildlife Service, USGS/BRD Great Lakes Science Center and NOAA/Great Lakes Environmental Research Laboratory revealed a high priority placed on the regional need for in-depth training to the next generation of leaders - i.e., those who are new leaders to their fisheries related organizations, those likely to become leaders of their organizations within the next few years, and those likely to be serving as advisors to Great Lakes fishery related institutions such as Lake Committees. These fisheries professionals note that the average citizen volunteer involved in Great Lakes fishery issues stays involved approximately five years, but that it takes two to three of those years to educate citizen volunteers in the issues, science and policy in order for them to be most effective. The proposed Great Lakes Fisheries Leadership Institute is designed to address this knowledge gap.

We envision a Great Lakes Fisheries Leadership Institute operating on a regional, lake and state level capable of providing emerging citizen fishery leaders with the knowledge and skills to effectively interact with Great Lakes fishery management organizations for the benefit of the fishery and its stakeholders. We envision this Institute as an on-going certificate program whose graduates will be widely respected and sought after as advisors on Great Lakes fishery related issues. This proposal seeks funding for operation of an initial (pilot) Great Lakes Fishery Leadership Institute which can provide the foundation for a long-term, sustained and expanded program for the Great Lakes region should appropriations for Sea Grant fisheries extension increase or should Great Lakes partners find alternative resources for its continuation.

Curriculum materials to be used in this Institute will be developed using regional base funds for fisheries extension enhancement. Hence this proposal includes funding only for the operation of the Institute and does not include funds for curriculum development.

Objectives of the Great Lakes Fisheries Leadership Institute

The goal of the Great Lakes Fisheries Leadership Institute is to provide the next generation of fisheries leaders for the Great Lakes region with the skills which they will need to effectively interact with fisheries management agencies and provide real leadership to the region as well as to their organizations. Objectives include:

1. Develop stakeholders from each Great Lakes state as Great Lakes Fishery Leaders - a cohort of leaders with the knowledge and skills necessary to provide effective leadership on fisheries management issues,
2. Create a network of Great Lakes leaders from the broadest possible variety of backgrounds and organizations who are able to call upon each other to effectively address and/or advocate regional needs
3. Empower these fishery leaders to influence policy decisions and legislative initiatives
4. Maximize the effective life of citizen volunteers by condensing the learning curve,
5. Minimize frustration of both Great Lakes fisheries management agencies and those citizen leaders and who do not understand the complexities of Great Lakes fishery-related institutional arrangements, history and science.
6. Expose leadership from one end of the Great Lakes region to the issues and concerns of the other parts of the region.
7. Multiply the ability of Great Lakes Sea Grant Extension to reach constituent audiences using a 'teach-the-teacher' model.

Description of Approach for the Great Lakes Fisheries Leadership Institute

Participants

The concept behind the Great Lakes Fishery Leadership Institute is to provide in-depth training to the 'next generation' of leaders - those who are new leaders to their fisheries related organizations, those likely to become leaders of their organizations within the next few years, and those likely to be serving as advisors to Great Lakes fishery related institutions (e.g., Lake Committees). Selection of appropriate participants is an important key to the success of the Institute program. Participants will be nominated and selected by a steering committee which will be composed of partner agencies (e.g., Great Lakes Fishery Commission, U.S. Fish and Wildlife Service) and current Great Lakes fishery leadership (including private sector representation from the sport fishing community). Participants will be selected to represent a variety of organization 'types' -environmental NGOs, commercial fishermen, charter captains, tribes, sportfishing associations, visitor bureaus, science writers, legislators, legislative aides, etc. This mix of participants will help participants in the Institute to deepen their understanding of the multiple perspectives and stakeholders involved in any Great Lakes fishery management decision. Following the National Extension Leadership Development (NELD) and Master Gardener models, nominees will be required to make a specific commitment to the Great Lakes fishery as part of their application for participation in the Great Lakes Fishery Leadership Institute. Rather than requiring a certain number of hours of vaguely defined 'service' of

participants, we plan to maintain maximum flexibility while obtaining maximum service by allowing nominees to define their own commitment. For example, a science writer might commit to writing a certain number of articles in the year following participation in the Institute while an angler might commit to serving as an officer for his or her local sportfishing association. Specific commitments will be considered in final selection of participants. Participants will be charged a nominal fee for participation in the Institute to ensure commitment and aid in cost recovery.

Critical mass of participants is a key factor to the success of the Great Lakes Fishery Leadership Institute. Sixty participants overall and seven on a per lake or per state basis is considered to be the minimum needed for success. Funds sought through this proposal should be sufficient to support this minimal critical mass. Additional funding will be sought from Great Lakes partner agencies and institutions to enhance the Great Lakes Fishery Leadership Institute above these minimums.

Form

Training will occur on the state and lake levels. Lake level training is likely to be the key level as most Great Lakes infrastructure and issues are lake-specific. State level training is essential to allow participants to meet State-level officials (managers and legislators), learn state-specific regulations, and discuss state-specific issues. Future regional training is desirable to enhance understanding of the Great Lakes as a complex interconnected system, enhance understanding of local differences (e.g., why are cormorants a problem on Lake Ontario but not on Lake Superior), and to build a regional cohort able to work together effectively.

Most Institute sessions will be held in early 2003. State level meetings will be organized by individual Great Lakes Sea Grant programs and lake level meetings will be organized jointly by individual Sea Grant programs bordering on the Lake as follows:

Minnesota State Session:	Jeff Gunderson, Program Leader, Minnesota Sea Grant
Wisconsin State Session:	Phil Moy, Fisheries Specialist, Wisconsin Sea Grant
Illinois State Session:	Brian Miller, Program Leader, Illinois/Indiana Sea Grant
Indiana State Session:	Brian Miller, Program Leader, Illinois/Indiana Sea Grant
Michigan State Session:	John Schwartz, Program Leader, Michigan Sea Grant
Ohio State Session:	Frank Lichtkoppler, Co-Program Leader, Ohio Sea Grant
Pennsylvania State Session:	Eric Obert, Program Leader, Pennsylvania Sea Grant
New York State Session:	Dave White, Program Coordinator and Dale Baker, Program Leader, New York Sea Grant
Vermont State Session:	Mark Malchoff, Program Leader, Lake Champlain Sea Grant
Lake Superior Session:	Jeff Gunderson, Program Leader, Minnesota Sea Grant Phil Moy, Fisheries Specialist, Wisconsin Sea Grant John Schwartz, Program Leader, Michigan Sea Grant
Lake Michigan Session:	Phil Moy, Fisheries Specialist, Wisconsin Sea Grant Brian Miller, Program Leader, Illinois/Indiana Sea Grant

Lake Huron Session:	John Schwartz, Program Leader, Michigan Sea Grant
Lake Erie Session:	John Schwartz, Program Leader, Michigan Sea Grant
	John Schwartz, Program Leader, Michigan Sea Grant
	Fred Snyder and Frank Lichtkoppler, Co-Program Leaders, Ohio Sea Grant
	Eric Obett, Program Leader, Pennsylvania Sea Grant
	Dave White, Program Coordinator and Dale Baker, Program Leader, New York Sea Grant
Lake Ontario Session:	Dave White, Program Coordinator and Dale Baker, Program Leader, New York Sea Grant
Lake Champlain Session:	Mark Malchoff, Program Leader, Lake Champlain Sea Grant

Format of the individual meetings will be left to the hosting Sea Grant program(s). Some programs may opt for a weekend-long intense event, others for a series of meetings of a few hours duration spread over several weeks. Maintaining maximum flexibility at the local level in organizing these events is key to meeting the needs of local participants.

Skills

Taken together, state, lake and regional levels will be designed to give participants a set of commonly defined skills. These skills were determined after consultation with our partner agencies as those providing a foundation for enhanced effectiveness of stakeholder groups in their participation in Great Lakes fishery management decision-making. All participants should leave the program with...

- a network of peers drawn from a variety of stakeholder groups
- a network of expert contacts (scientists, managers, legislators, etc)
- enhanced ability to see multiple sides of any issue
- a basic understanding of fish biology
- the tools necessary to identify Great Lakes fish species
- a basic understanding of Great Lakes food webs - including the effects of lower trophic level changes on fish (physiology and species composition)
- the ability to read and interpret science relevant to the Great Lakes fisheries
- a basic understanding of the effects and potential effects of aquatic nuisance species on Great Lakes fish
- a basic understanding of laws relating to the prevention and control of aquatic nuisance species
- a basic understanding of the direct and indirect effects of contaminants on Great Lakes fish
- a thorough understanding of Great Lakes fish consumption advisories
- a basic understanding of Great Lakes fish habitat needs
- knowledge of Great Lakes fish habitat restoration successes
- a basic understanding of the impacts of land **use** on fish habitat
- a basic knowledge of the history of Great Lakes fishery management
- a basic understanding of the processes which feed into fisheries management decisions

- a basic knowledge of Great Lakes fishery management jurisdictions
- familiarity with key federal and state fisheries managers and institutions
- basic understanding of Great Lakes institutional arrangements relevant to the fishery
- basic leadership skills
- a basic understanding of opportunities for public participation in the Great Lakes fisheries
- localized understanding of current issues relevant to the Great Lakes fishery
- an awareness of the economic importance that Great Lakes fisheries have on regional, statewide and coastal community scales.

Curriculum

Participants in the Great Lakes Fishery Leadership Institute will receive and use standard curriculum materials. Use of a standard curriculum is important to ensuring the quality of the Institute and to ensuring that all participants receive the same essential elements and develop the same essential skills regardless of the organizer or instructor for a particular component. Use of a core curriculum will also help to promote exposure of participants to examples from outside their immediate locality, thus enhancing the perception of the Great Lakes as a whole. The core curriculum will consist of eight modules: 'Aquatic Science', 'Aquatic Nuisance Species Effect on Sustainability', 'Fishery Habitat', 'Contaminant Issues Relevant to Great Lakes Fisheries', 'Fisheries Management', 'Great Lakes Fishery Agencies: Institutional Arrangements, Funding and Politics', 'Public Participation', and 'Leadership'. All curriculum materials for each module except 'Leadership' will be developed by the Great Lakes Sea Grant Network with the assistance and input of our partner agencies e.g., Great Lakes Fishery Commission, U.S. Fish and Wildlife Service, NOAA/Great Lakes Environmental Research Lab, USGS/Great Lakes Science Center, etc) and other current Great Lakes fishery leaders (including private sector representation from the sport fishing community) using regional Fisheries Extension Enhancement funds. Each module will be taught by appropriate experts or a combination of experts with opportunity for discussion of local examples and issues. Instructors may vary by state or lake. While some instructors are likely to be Sea Grant Extension agents, most are likely to be drawn from our partner agencies. This direct contact with key fishery managers, scientists and other officials is a critical element of the Great Lakes Fishery Leadership Institute concept. The Leadership module will be taught using standard materials and experts drawn from an appropriate University source. This module is intended to teach basic leadership skills such as how to conduct a meeting or how to be an effective lobbyist.

Certificate

Participants who successfully complete the course of Great Lakes Fishery Leadership Institute sessions will receive a certificate. One goal of this project will be to build a confidence in this certificate such that its holders will be recognized and valued by Great Lakes Fishery management agencies (such as the Great Lakes Fishery Commission and U.S. Fish and Wildlife Service) and we in fact hope that certificate holders will eventually be eagerly sought as advisors to international, federal and state level Great Lakes fishery-related agencies.

Coordination

The Great Lakes Fisheries Leadership Institute and Great Lakes Fisheries Leadership Curriculum Development will be coordinated by Rochelle Stuttevant, Great Lakes Sea Grant Extension Agent at the Great Lakes Environmental Research Laboratory (NOAA/GLERL). This position was developed in part to increase regional coordination of the Great Lakes Sea Grant Network as well as to increase transfer of scientific expertise from NOAA/GLERL to Great Lakes constituents via Great Lakes Sea Grant Extension. As such, the position is uniquely suitable as a springboard for coordination of a regional effort. Like the regional position itself, fisheries extension coordination funds will be budgeted through Michigan Sea Grant. NOAA/GLERL hosted the Great Lakes Sea Grant Network planning sessions for development of the Fisheries Extension Enhancement proposals, including the session for input from partners. Similar meetings and conference calls needed as the process unfolds will also be hosted at NOAA/GLERL. The coordinator will be responsible for convening the steering committee and coordinating final participant selection to ensure a balanced group of participants at the regional level. The coordinator will act as a liaison for federal agency participants, steering committee members and instructors in addition to soliciting NOAA/GLERL expertise at all stages of curriculum development and instruction. The coordinator will work to ensure integration of the various state and lake sessions and consistency among programs as well as developing the regional component of the Institute. The coordinator will, of course, also be responsible for monitoring progress of the Institute sessions and reporting on the program to the National Sea Grant Organization.

Outcomes and Impacts

The immediate outcome of this initial Great Lakes Fishery Leadership Institute will be a cohort of more than sixty committed Great Lakes fishery leaders with the skills and knowledge base necessary to effectively engage Great Lakes fishery management agencies on the issues and capable of providing sound advice. Anticipated near-term impact of this cohort will be immediately quantifiable through the specific commitments required of all Institute participants. This initial cohort will provide the foundation for a long-term, sustained fisheries extension effort as, through a teach-the-teacher model, participants raise the level of constituent understanding, involvement and action in their home organizations and local communities.

Inclusion of our partner agencies in all stages of the development of the Great Lakes Fishery Leadership Institute will help to ensure the quality of the Institute and its usefulness to stakeholders, as well as to improve Sea Grant partnerships with these research and management agencies. The enthusiastic support evidenced by the attached letters of support indicates a serious commitment to this process on the part of our federal partners, particularly NOAA's Great Lakes Environmental Research Lab. Specific partners have committed to providing expertise, instructors, meeting space, ship time and other tangibles critical to the success of the Institute. Contact of the Great Lakes Fishery Institute participants with key staff from our partner agencies and Great Lakes fishery managers during the course of the Institute and beyond will greatly enhance the outreach capacity of these agencies -providing them with an immediate contact, credible to his or her peers, in a wide variety of stakeholder groups. We anticipate that many Institute participants will serve on Great Lakes fishery-related advisory bodies, such as the

Great Lakes Fishery Commission Lake Committees. The infusion of trained leaders with the knowledge and skills necessary to make informed recommendations will result in improved effectiveness of these important Great Lakes advisory groups.

One important indirect benefit of the Great Lakes Fishery Leadership Institute will be a realization by participants that though they may have differences on specific issues, all are Great Lakes stakeholders interested in the well-being of the Great Lakes resource. This indirect benefit will be enhanced through the inclusion in the program of opportunities for group discussion and less formal interactions among participants. We believe that an end result of this process will be development of a diverse, well-informed constituency for the Great Lakes that derives its knowledge from science-based information.

The Great Lakes Fishery Leadership Institute as proposed here is intended as a pilot program. We are highly confident in its success and anticipate that training of additional cohorts and/or advanced training variations will be possible when Great Lakes partner agencies and institutions see the value of this training and provide resources for its continuation or should the appropriations for an expanded Sea Grant fisheries extension program increase.

Evaluation

Training will be provided at state, lake and regional levels both in connection with the Great Lakes Fisheries Leadership Institute and over a period of several years by individual programs. This ongoing delivery of educational module projects will enable a constant dialog among trainers and participants (Institute and/or workshop students) to: 1) document knowledge gaps; 2) monitor/improve/update module delivery; and 3) assess the effectiveness of delivery (i.e. workshop evaluations). We anticipate that both formal and informal evaluation during the implementation phase will be readily accomplished due to the relatively small size of the institute(s), and the vested interest held by the participants. At a minimum, workshop evaluations will be conducted at each training event/site. Summaries of these evaluations will be available to subsequent trainers/organizers, for overall evaluation of the Great Lakes Fisheries Leadership Institute, and for the conclusion of the Fisheries Extension Enhancement program.

Of particular interest will be the expected behavior changes exhibited by Institute and/or workshop participants at some period after conclusion of the training session. Though specific criteria have yet to be developed, we may be able to track various overall constituent behavior changes and/or benefits to fishery resources. For example, we should be able to demonstrate an increase in contacts (or interactions) involving Institute participants and elected officials. We may also be able measure changes in the makeup or effectiveness of the various advisory committees. Where such evaluation is beyond the time frame of this proposal, we will seek outside resources that might enable such long-term evaluation.